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SUMMARY

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FACTORS INFLUENCING THE SETTING UP AND DEVELOPMENT OF THE IRON AND STEEL INDUSTRY IN THE LESS DEVELOPED COUNTRIES

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FACTORS INFLUENCING THE SETTING UP AND DEVELOPMENT OF THE IRON AND STEEL INDUSTRY IN THE LESS DEVELOPED COUNTRIES

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SUMMARY

Factors influencing the setting up and development of the iron and steel industry in the less developed countries are the material technical base and the market. This market depends upon the number of inhabitants. A country with few inhabitants cannot build,if it does not intend to export the major part of its production, an integrated iron and steel industry (i.e. with blast furnaces, coke plants, ore dressing plant, steel plants and rolling mills) for all kinds of metallurgical products, as particularly the rolling mills each have a capacity of more than one million tons a year, and sometimes even several million tons per year.

At present with a consumption of 500 kg of steel per head a capacity of 18 to 20 million tons per year would be necessary for the economical production of the whole range of metallurgical products.

The integrated iron and steel industry could be therefore constructed either in the countries with a great number of inhabitants or even in the countries with few inhabitants if these countries have a material technical base and if they decide for economic mutual aid. For the first stage 40 million inhabitants are required. Integrated iron and steel works consider as a minimum a production unit of 4 million tons of steel per year with a raw material base for 50 years at least, and with low-cost transport. The building of such a work would require an investment of 500 to 600 million dollars, 15,000 man power and 8 years to complete the building of the first stage.

The non-integrated metallurgical industry can be established in the less developed countries with a small population on the seacoast or on a navigable river. This industry using lumps, scrap or sponge iron will have an annual capacity of 500,000 to 1,000.000 tons. This capacity could be gained within 5 to 6 years. This plant could include rolling mills for low capacities with a low productivity for small orders and would need 2500 to 3500 employees. Such plant could be erected with the sum of 70 to 80 million dollars.

S - 1098 E - Oct.1962 - 1,600